

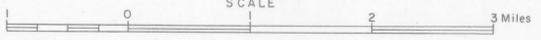


EXPLANATION

- SEDIMENTARY ROCKS**
- Recent**
    - Qal Alluvium
    - Qtpg Terrace and pediment gravels
  - Pliocene(?)**
    - Qls Landslide
    - Tc Chuska sandstone
  - Mesaverde group**
    - Krf Kirtland and Fruitland formations undivided
    - Kmf Menefee formation
    - Kpl, Khl, Kkg Lower part of Mesaverde group including Kpl, Point Lookout sandstone (Upper part of Hasta sandstone member south of report area); Khl, lower Haste sandstone member and Kkg, Gallup sandstone member.
    - Kms, Kmu, Kmm, Kml Mancos shale including Kmu, upper part of Mancos shale with Kms, Satan tongue, and Kmm, Muleto tongue; Kml, lower part of Mancos (below Gallup sandstone member).
  - Upper Cretaceous**
    - Kd Dakota sandstone
  - Lower(?) and Upper Cretaceous**
    - Jmu, Jmm, Jml Morrison formation (Upper, middle, and lower members mapped locally).
  - Upper Jurassic**
    - Js Summerville formation
    - Jll Todilto limestone
    - Jec Entrada sandstone and Carmel formation.
  - Upper Triassic and Lower Jurassic**
    - Jgu UNCONFORMITY(?)
    - Jcu Glen Canyon group undivided
  - Upper Triassic**
    - Rc Chinle formation
    - Rsh Shinarump conglomerate
  - UNCONFORMITY**
    - Pcd DeChelly sandstone
  - IGNEOUS ROCKS**
  - Tertiary**
    - Ti Basic intrusive rocks (Dikes and small volcanic necks)
    - To Agglomeratic intrusive
    - Tb Basalt
    - Tb2 Late basalt
    - Twf Welded tuff
    - Tb1 Early basalt
    - Tv Stratified tuffaceous agglomerate and lithic tuff
- Geologic contact**  
 Dashed where inferred, dotted where concealed
- Inferred fault**  
 U, upthrown; D, downthrown.
- Strike and dip of beds**  
 / 5
- Bench mark**  
 x BM 5717
- Triangulation station**  
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PRELIMINARY GEOLOGIC MAP OF THE TOADLENA QUADRANGLE  
 SAN JUAN COUNTY, NEW MEXICO

By  
 D.L. Ziegler  
 SCALE



1955